

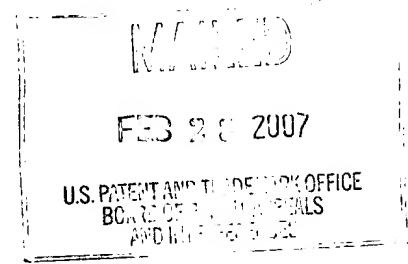
The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

*Ex parte JEAN-PAUL CANO, YVES LECLAIRE,
and ROBERT ANNE*

Appeal 2007-0290
Application 09/778,464
Technology Center 1700



ON BRIEF

Before SCHEINER, LINCK, and LEBOVITZ, *Administrative Patent Judges*.

LEBOVITZ, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal from a final rejection of claim 1-3, 5, 6, 10, 11, 13, 15, 18, and 20-24 under 35 U.S.C. § 103(a). We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF CASE

The claims in this appeal are to ophthalmic lenses. According to the application's "Background of the Invention," ophthalmic lenses comprising an organic glass, impact-resistant primer, hard abrasion-resistant primer, and anti-reflective coating were known in the prior art.

When the lens comprises an abrasion-resistant coating in its structure, the anti-reflective coating is deposited onto the surface of the abrasion-resistant layer. Such layering reduces the impact strength by stiffening the system, which becomes breakable. This problem is well known in the industry of ophthalmic lenses made of organic glass.

Id. at 1: 21-25.

A number of solutions have been proposed in the state of the art. They generally consist in applying an impact-resistant primer to the substrate of the lens and then applying the hard abrasion-resistant coating and, lastly, the anti-reflective coating.

Id. at 1: 26-29.

Appellants assert that they have

now discovered, unexpectedly, that it is possible to insert an impact-resistant primer between the anti-reflective and hard coatings without modifying the function of this primer, in order to obtain an ophthalmic lens which is sufficiently resistant to abrasion and to impacts and which has satisfactory anti-reflective properties.

Id. at 2: 24-29.

The prior art relied upon by the Examiner in rejecting the claims in this appeal is:

Taniguchi U.S. Pat. 4,904,525 Feb. 27, 1990.

Claims 1-26 are pending. Br. 2. Claims 1-3, 5, 6, 10, 11, 13, 15, 18, and 20-24 stand rejected under 35 USC § 103(a) as obvious over Taniguchi. Br. 3. Separate reasons for patentability were not presented for any individual claims. Consequently, we select claim 1 as representative for the purpose of deciding this appeal. 37 CFR § 41.37(c)(1)(vii). It reads as follows:

1. Ophthalmic lens consisting of a substrate made of organic glass, of an abrasion-resistant coating, of a layer of impact-resistant primer and of an anti-reflective coating, wherein the surface of the substrate is covered with the abrasion-resistant layer and the anti-reflective coating, and wherein the abrasion-resistant coating is a silicone based coating or an acrylic based coating.

ISSUE

The Examiner contends that Taniguchi teaches a lens comprising a “second fluorine-containing organopolysiloxane film” which meets the requirement in claim 1 of an ophthalmic lens comprising “an anti-reflective coating.” Appellants contend that the “second fluorine-containing organopolysiloxane based film” described in Taniguchi “cannot be considered as an anti-reflective layer.” Br. 10. They provide a declaration under 37 CFR § 1.132 to support their contention.

The sole issue in this appeal is whether the declaration is sufficient to establish that a person of ordinary skill in the art would not have considered Taniguchi’s “second fluorine-containing organopolysiloxane based film” to satisfy the “anti-reflective coating” limitation of claim 1, rebutting the Examiner’s *prima facie* case of obviousness under 35 USC § 103.

DISCUSSION

Claim 1 is drawn to an ophthalmic lens consisting of the following elements: (1) organic glass; (2) an abrasion-resistant coating; (3) a layer of impact-resistant primer; and (4) an anti-reflective coating. The Examiner asserts that Taniguchi describes an optical lens that contains each of these four elements. Answer 3-4.

The only element in contention is (4) the anti-reflective coating. According to the Examiner, Taniguchi’s “second fluorine containing organopolysiloxane,” which is described as for preventing electric charge from forming on the lens surface (col. 8, ll. 22-25 and 33-36), meets the requirement in claim 1 of “an anti-reflective coating.” The Examiner asserts that the second fluorine containing organopolysiloxane coating is “deemed to have some anti-reflective properties since the optical article has less than 2.7% reflectance per face.” Answer 4. The Examiner concludes that “[a] person of ordinary skill in the art . . . would have found it obvious to adjust the abrasion resistance and anti-reflective properties of [the] respective layers for [the] desired application.” *Id.*

Appellants contend that the second fluorine containing organopolysiloxane based film is not an anti-reflective coating. They provide a declaration under 37 CFR § 1.132 by Mr. Philippe Roisin (hereinafter, “the Roisin Declaration”) in which the optical properties of ophthalmic lenses, coated with various chemical films (“stackings”), are determined. Roisin Declaration 2. Based on the results, Mr. Roisin concludes that Taniguchi’s second film would not be considered an anti-reflective coating by the skilled worker. *Id.* at 3.

During patent examination, the Examiner bears the initial burden of presenting a *prima facie* case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). *Prima facie* obviousness requires that each element of the claimed invention be identified in the prior art and that “some objective teaching in the prior art or

that knowledge generally available to one of ordinary skill in the art would lead the individual to combine the relevant teachings of the references.”

In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

See *In re Huston*, 308 F.3d 1267, 1280, 64 USPQ2d 1801, 1810 (Fed. Cir. 2002). When a prima facie case is made, the burden shifts to the patent applicant to come forward with evidence and/or argument supporting patentability. *Oetiker* at 977 F.2d 1445, 24 USPQ2d 1444.

Here, the Examiner rejects the claims as obvious based on the Taniguchi patent, explaining where each element of the claimed ophthalmic lens can be found in the patent and why, in view of Taniguchi’s disclosure, the claimed subject matter would have been obvious to a person of ordinary skill in the art. Answer 3-4. Because we find no fault with this evidence or reasoning, we conclude that the Examiner has established a prima facie case of obviousness, shifting the burden to Appellants to present additional evidence or arguments to support their position. *Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444.

To rebut the Examiner’s case, Appellants introduce the Roisin Declaration which they assert establishes that Taniguchi’s second fluorine containing organopolysiloxane based film would not be considered an anti-reflective coating by the skilled worker. Br. 14. They conclude that Taniguchi’s lens does not have the four elements required by claim 1.¹ *Id.*

¹ Appellants also state that Taniguchi does not provide “any motivation for introducing an intermediate impact-resistant primer layer between a hard coat and an antireflective coating.” Br. 14. However, the claims are not limited to this arrangement. Consequently, this argument has no merit.

We do not find the declaration persuasive. Mr. Roisin's conclusion is based on computer modeling (Roisin Declaration at 2) which is asserted to show that lens Stacking 4, stated to contain 1) substrate; 2) hard coat; and 3) second fluorine containing organopolysiloxane-based film, has a mean "reflexion value" greater than 4%. Roisin declaration at 3 (Stacking 4 has values of 5.06, 4.85, and 4.24, depending on the film's thickness). Roisin asserts:

For the skilled person, a coating which does not lower the reflexion value (per face) to at least 2.5% is not considered as an antireflective coating. This 2.5% value is the limit typically considered by the skilled persons as characterizing an anti-reflective coating.

Id. at 3. In comparison, Stackings 2 and 3, which contain a coating described by Taniguchi as having anti-reflective properties, have values less than 2.5%. *Id.* From this data, Roisin concludes that Taniguchi's organopolysiloxane-based film asserted by the Examiner to have anti-reflective properties, would not be considered by the skilled worker to be an anti-reflective coating.

The problem with this evidence, as pointed out by the Examiner (Answer 5), is that while Stacking 4 is described to have a hard coat on pages 2 and 3 of the Roisin declaration, Annex 1 of the Roisin declaration shows that the Stacking 4 hard coat has the same properties ($n=1.39$; $e=100$ nm) as the "antireflective coating" in Stackings 2 and 3 ($n=1.39$; $e=100$ nm). In other words, Stacking 4 does not appear to lack an antireflective coating as asserted by Mr. Roisin, undermining the logic which led to his conclusion that Taniguchi's second film layer "is not an

antireflective coating.” Roisin declaration at 4. Appellants do *not* clarify this inconsistency nor respond to the Examiner’s objection to the declaration.

CONCLUSION OF LAW

The Roisin declaration is insufficient evidence to rebut the Examiner’s *prima facie* case of obviousness under 35 USC § 103.

We affirm the rejection of claim 1. Because separate reasons for their patentability were not provided, claims 2, 3, 5, 6, 10, 11, 13, 15, 18, and 20-24 fall with claim 1.

OTHER ISSUES

Claim 19 is not rejected over prior art. Upon return of the application to the technology center, we suggest that the Examiner clarify in the record whether the limitations recited in claim 19 are not disclosed or suggested by the prior art.

If further examination of the claimed subject matter in this application is undertaken, the Examiner should consider the following issues as they relate to the patentability of the claims.

1) As discussed on p. 2 *supra*, Appellants admit in their application that a lens comprising an impact-resistant primer, abrasion-resistant primer, and anti-reflective coating was known in the prior art. Specification 1: 26-29. The Examiner should consider whether this admitted prior art anticipates and/or renders obvious claim 1 or other pending claims.

The Examiner should also consider requesting under 37 CFR

§ 1.105(a) the information upon which Appellants based this admission.

2) Appellants' patentability argument in the Brief is based on their construction of the phrase "anti-reflective coating" in claim 1 to require a mean reflexion value of 2.5% or less. During patent examination, claims are given their broadest reasonable interpretation in light of the specification as it would be understood by one of ordinary skill in the art. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1364, 70 USPQ2d 1827, 1827 (Fed. Cir. 2004). The Examiner should interpret the phrase "anti-reflective coating" in view of the specification and the evidence provided by Appellants, especially the following disclosures:

2a) According to the specification:

The anti-reflective layer can be any layer or stack of layers which improves the anti-reflective properties of the ophthalmic lens such that the reflexion value (per face) as defined by ISO/DIS 8980-4 standard is at most 2.5%.

Id. at 12, l. 34 to 13, l. 2.

2b) To support the assertion that "a coating which does not lower the reflexion value (per face) to at least 2.5% is not considered as an antireflective coating" by the skilled worker, Mr. Roisin states that "[t]his value is the value that has been selected for defining an anti-reflective coating in the International standard ISO/DIS 8980-4 which is presently under discussion for approval." Roisin declaration at 3. According to Appellants, "this International standard was adopted." Br. 12. However, documentary evidence of this adopted standard was not provided. Furthermore, Appellants do not explain how the adopted standard is evidence of how the phrase "anti-reflective coating" would be understood by

a person of skill in the art. Finally, we note that the claims are not limited to this value.

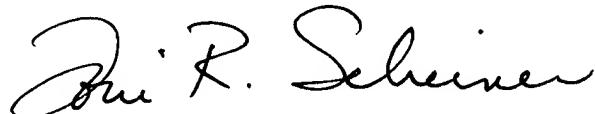
2c) In the material titled “Coatings” which was appended to Mr. Roisin’s declaration, it is stated that “[g]enerally speaking, antireflection coatings available on the market can be classified into three categories.” The standard efficiency is listed as “1.6 to 2.5%.” It is not clear how evidence of commercial availability supports the assertion that the skilled worker would have construed “anti-reflective coating” to be limited to a mean reflexion value of 2.5% or less.

3) In the Roisin declaration, it is stated that the “second fluorosilicone film (antistatic coating) [of Taniguchi] cannot be considered an anti-reflecting coating since” its mean reflexion value is higher than 2.5%. *Id.* at 3. However, the Roisin declaration provides only one example of a second film. Taniguchi’s disclosure is broader (*e.g.*, at col. 8, ll. 21-43), apparently including the same compounds which are used to prepare the anti-reflective top coating. Thus, it is not clear that the showing in the Roisin declaration is commensurate with Taniguchi’s disclosure. In particular, it is not evident that all Taniguchi’s second films would not possess anti-reflective properties according to Appellants’ criteria.

TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

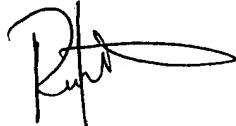
AFFIRMED



TONI R. SCHEINER)
Administrative Patent Judge)



NANCY J. LINCK)
Administrative Patent Judge)



RICHARD M. LEBOVITZ)
Administrative Patent Judge)

) BOARD OF PATENT

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